

# Clean Water Action Water Forum for PFAS issues in Holbrook/Randolph/Braintree Tri-Town reservoir & water system



Presented by  
Randolph Town Councilor Jesse Gordon

June 22, 2022 at 6 PM at  
Winthrop Congregational Church  
16 North Franklin Street  
Holbrook MA (next door to Town Hall)

# Tri-Town Water & PFAS

- A) What is our current and planned water treatment plant?
- B) Why do we get PFAS reports in the mail?
- C) How does PFAS filtering work?
- D) Where does PFAS come from?
- E) What can we do to improve PFAS filtering?
- F) What can we do to reduce PFAS sources?

## A) What is our current and planned water treatment plant?



Our water treatment plant is very old and will be replaced in a couple of years.

Holbrook Select Board Member William Watkins at the Randolph/Holbrook water treatment plant at 275 Pond Street, North Randolph

- Yes, that rusty water tower is still in use, until we replace this entire water treatment plant in 2-3 years.
- You can drive by the “rusty tower” via West Street in Braintree, the northern border of the Tri-Town reservoir, which becomes Pond Street in Randolph.
- (The rust on the water tower is because it’s very old – rust is not a source of PFAS! – and we don’t drink water from that tower! – but the old age of the plant IS one reason that we have a PFAS problem!)

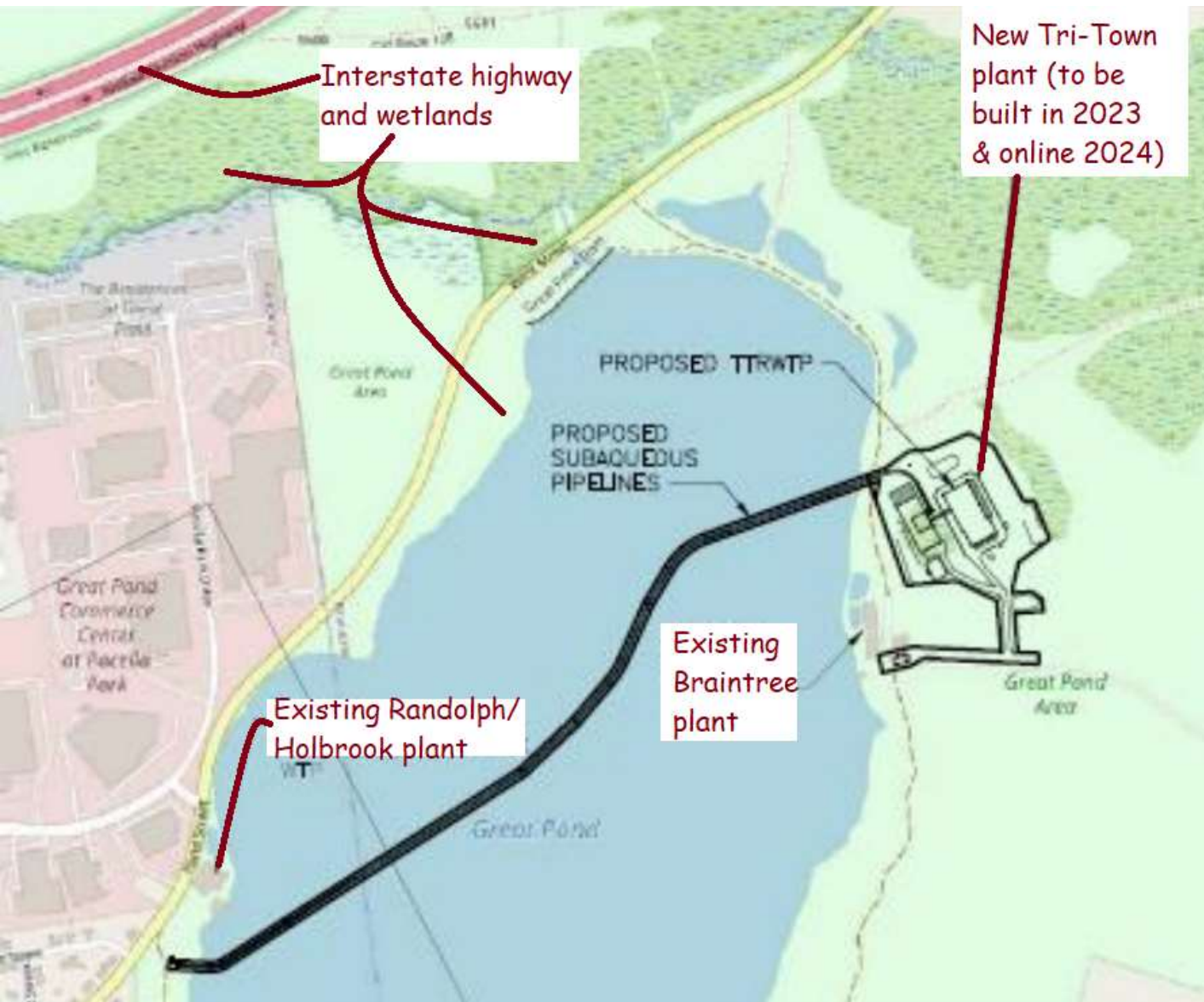
1/22/22



# A) What is our current and planned water treatment plant?



Town Councilors Natacha Clerger and Jesse Gordon have several more videos on website!



A) What is our current and planned water treatment plant?

Currently two water treatment plants:

- One on west side of reservoir built in 1885 for Holbrook and Randolph
- One on east side of reservoir for Braintree – will also be replaced
- New plant on east side for all three towns
- Planned opening ~2024

## B) Why do we get PFAS reports in the mail?

- PFAS is unhealthy so if there's high PFAS levels towns must mail out reports saying things like “avoid babies drinking the water”
- Federal rules require PFAS levels under 70 ppt (parts per trillion, which is the same as “ng/L” but easier to say)
- Newer Massachusetts rules require PFAS levels under 20 ppt
- If output water exceeds an average of 20 ppt in one quarter (three months in a row) then PFAS report must be sent to all water consumers
- Holbrook & Randolph had to send out reports in 2020 and 2021
- Braintree exceeded 20 ppt in early 2022 but only for one month (so no report in mail)
- PFAS is higher in warmer months – another PFAS mail in September?!

## B) Why do we get PFAS reports in the mail? (2021 report)

### PFAS6 Results for Randolph/Holbrook Joint Water Plant

Quarterly Compliance Period	Monitoring Period	Sample Collection Date	PFAS6 Result (ng/L)	Quarterly Average (ng/L)	PFAS6 MCL (ng/L)
Quarter 2, 2021	Month 1	4/19/2021	18.8	19	20
	Month 2	5/10/2021	18.5		
	Month 3	6/07/2021	20.1		
Quarter 1, 2021	Month 1	7/7/2021	23.4	25*	20
	Month 2	8/3/2021	27.0		
	Month 3	9/8/2021	25.5		

\* A quarterly average exceeding 20 is a violation of the PFAS6 Maximum Contaminant Level (MCL).



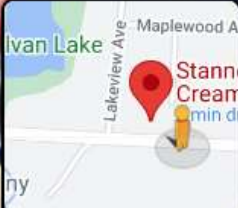
## B) Why do we get PFAS reports in the mail? (2021 warnings)

### *What do I need to do?*

- Consumers in a sensitive subgroup (pregnant or nursing women, infants and people diagnosed by their health care provider to have a compromised immune system), are advised not to consume, drink, or cook with water when the level of PFAS6 is above 20 ng/L.
- **Consumers in sensitive subgroups** are advised to use bottled water for drinking and cooking of foods that absorb water (like pasta).
- **For infant formula**, use bottled water or use formula that does not require adding water.
- **For older children and adults not in a sensitive subgroup**, the 20 ng/L value is applicable to a lifetime of consuming the water. For these groups, shorter duration exposures present less risk. However, if you are concerned about your exposure while **steps are being taken to assess and lower the PFAS concentration in the drinking water**, use of bottled water will reduce your exposure.

(This is the legal notice sent out in 2021. Let's see the “**steps to lower PFAS**” ...)

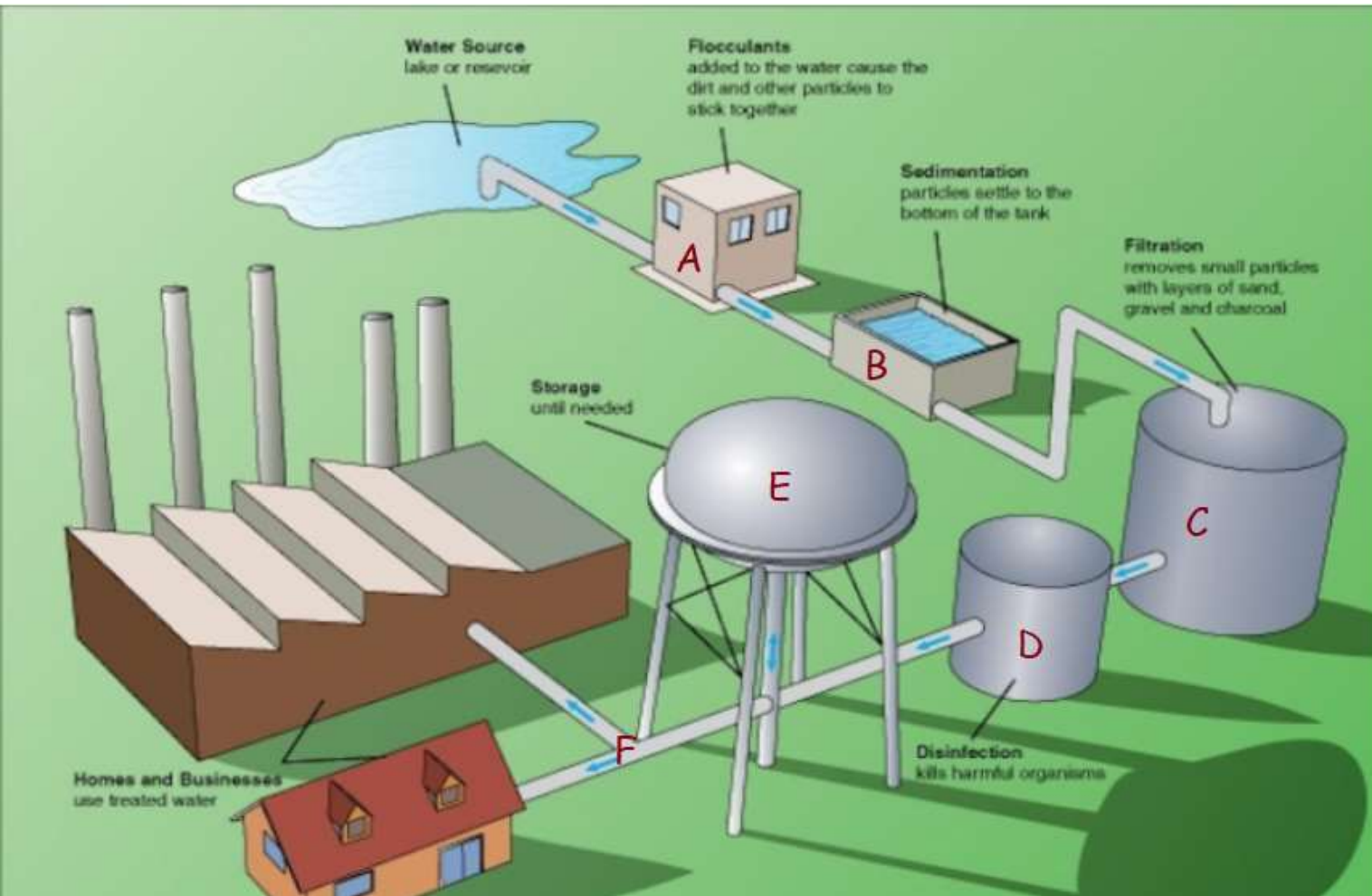




PFAS-free water at no cost, for Holbrook/Randolph residents at Stanney's (300 Union St. Holbrook) & DPW (behind 240 North St, Randolph)

You can get drinking water for free (bring your own container)

## C) How does PFAS filtering work?



PFAS filtering is in step C

A/B/C/D are all in one building in current Randolph/Holbrook plant (This is getting rebuilt)

E (water towers) have several around town (no change during rebuild, but we DO have to replace these too!)

F distribution pipes are miles long (no change after rebuild)



## C) How does PFAS filtering work?



These are what our “filters” actually look like (except ours are indoors)

Randolph/Holbrook has 8 big tanks (Braintree has 5 even bigger tanks)

Raw water pumped in, on top, and filters down through filtering material.

Clean water is pumped out, at the bottom.

## C) How does PFAS filtering work?

- Old water-filtering material doesn't remove PFAS – it needs to be replaced with “GAC” (Granulated Activated Carbon)
- Braintree replaced its filter material with GAC two years ago, but it is now “saturated” so they must replace it.
- Replacing each filter tank's GAC costs about \$50,000 per “recharge.”
- Randolph/Holbrook did not replace any filter material because of risk to very old outflow pipes at bottom of the tanks
- Both plants use the same raw water, but Braintree's filters remove some of the PFAS (while Randolph/Holbrook don't).
- New water treatment plant will still require periodic GAC recharge



## D) Where does PFAS come from?

One possible source is Sylvan Lake (part of Baird/McGuire “Superfund” contaminated site – it was tested several years ago and found under 70 ppt)

Town Councilors Jesse Gordon and Natacha Clerger show where the Cochato River crosses the Randolph/Holbrook train station

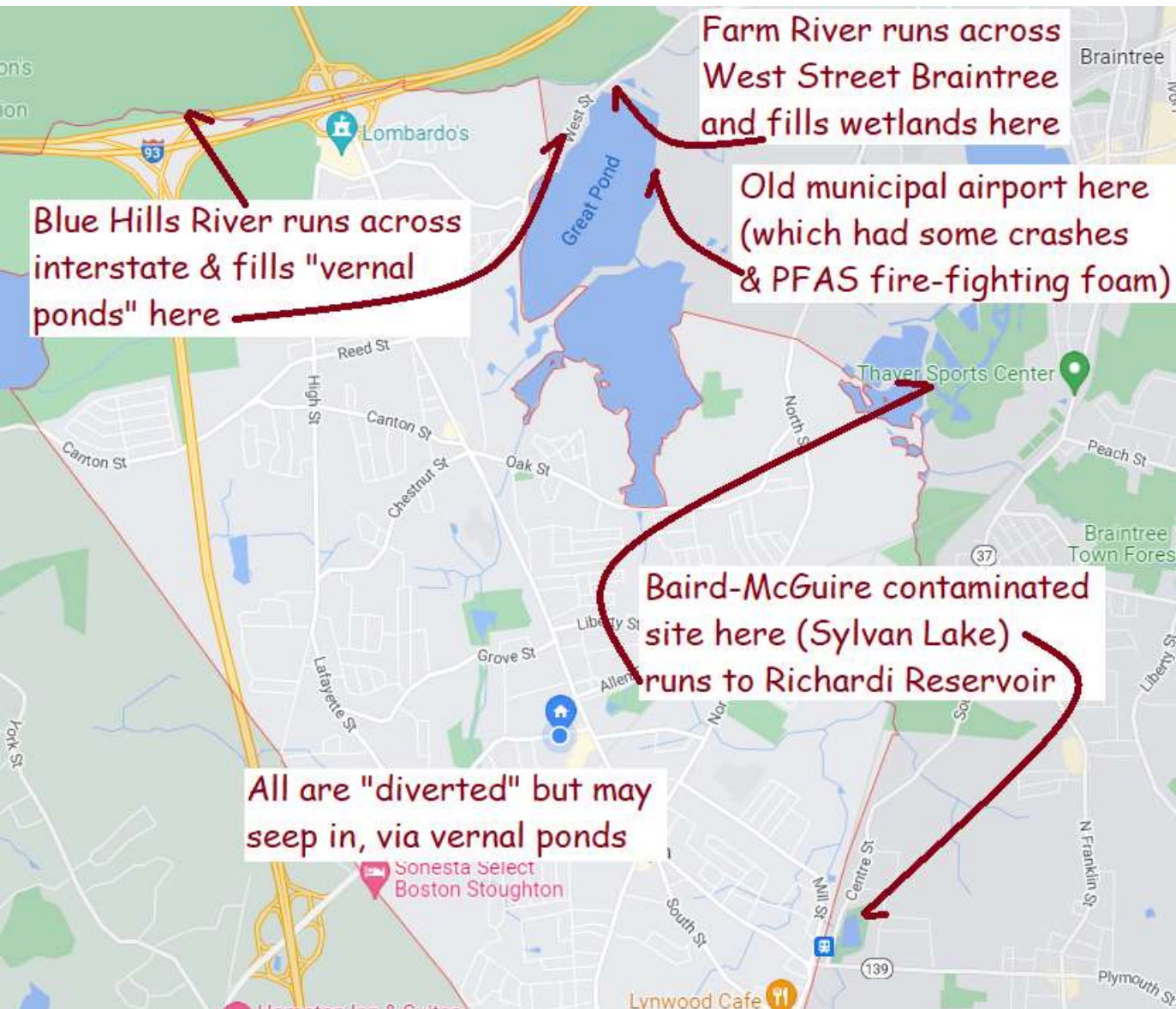


From there, the contaminated water heads toward the Richardi Reservoir (our backup reservoir) on the Randolph/Braintree border

(video on website!)

## D) Where does PFAS come from?

- PFAS doesn't occur naturally in our reservoir – it comes from some external source, which we can identify and remove.
- Removing the sources means PFAS levels could fall to near-zero permanently (reducing the annual expense of filtering).
- We haven't identified the sources yet, but some possible sources for PFAS in our reservoir are:
  1. Road runoff from the interstate, or from regular streets, which contaminate wetlands near the reservoir
  2. Fire-fighting foam from car fires or airplane fires
  3. Baird-McGuire contaminated superfund site, via Cochato River



Blue Hills River runs across interstate & fills "vernal ponds" here

Farm River runs across West Street Braintree and fills wetlands here

Old municipal airport here (which had some crashes & PFAS fire-fighting foam)

Baird-McGuire contaminated site here (Sylvan Lake) runs to Richardi Reservoir

All are "diverted" but may seep in, via vernal ponds

D) Where does PFAS come from?

All possible contaminated rivers are "diverted" (blocked from directly feeding into the reservoir)

But any PFAS in the diverted rivers still leaches in, through underground seepage

That's how a "watershed" works – water doesn't leave!

E) What can we do to improve PFAS filtering?

Write to Randolph and Holbrook to implement this resolution!

**Resolution 2022-02**

**Introduced By: Councilors Natacha Clerger and Jesse Gordon**

**March 28, 2022**

**RESOLUTION CONCERNING PFAS FILTRATION**

WHEREAS the measured PFAS level in the Randolph and Holbrook drinking water have exceeded the state limit of 20 ppt twice in the last year; and

WHEREAS the Braintree water treatment plant, using the same source water, has reduced its PFAS level to well under 20 ppt by replacing their water filter material entirely with GAC (Granulated Activated Carbon); and

WHEREAS the Randolph/Holbrook water treatment plant is older and more fragile, so that a 100% replacement of water filter material with GAC would entail high risk of equipment damage; and

WHEREAS the Randolph Town Council seeks to join with the Holbrook Board of Selectmen in supporting this Resolution:



E) What can we do to improve PFAS filtering?

This resolution passed unanimously in the Randolph Town Council, and was raised in the Holbrook elect Board too – but it needs to be implemented by the Joint Water Board!

**Resolution 2022-02**

**Introduced By: Councilors Natacha Clerger and Jesse Gordon**

**March 28, 2022**

NOW THEREFORE BE IT RESOLVED that the Randolph Town Council supports exploration of the cost and risk of replacing 50% of the existing water filter material with GAC at the Randolph/Holbrook water treatment plant; and

BE IT FURTHER RESOLVED that if the costs and risks are reasonable, that the Randolph Town Council would encourage the Joint Board to adopt measures to replace the existing water filter material with GAC in one or more of the eight water filters over a period of one or more months at the Randolph/Holbrook water treatment plant; and

BE IT FURTHER RESOLVED that if the costs and risks are unreasonable, that the Randolph Town Council would encourage the Joint Board to explore the cost and risk of other percentages of partial material replacement at the Randolph/Holbrook water treatment plant and/or other methods of reducing PFAS in our drinking water.

E) What can we do to improve PFAS filtering?

Proposed letter to Randolph, Holbrook, and Joint Board:

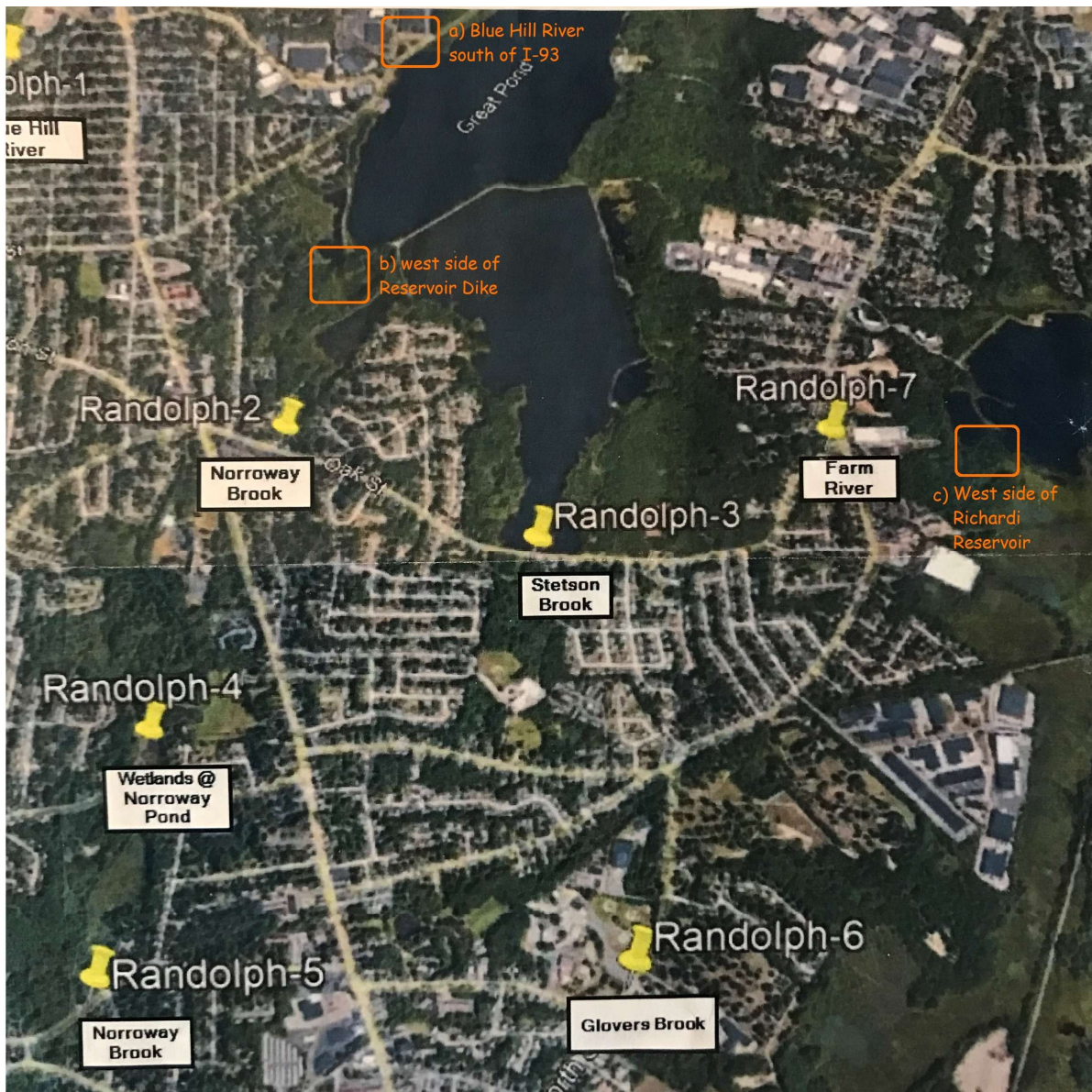
To whom it may concern,

I am a resident who drinks water from the Randolph/Holbrook water treatment, and I'm concerned about PFAS in our drinking water.

Please implement "GAC filtering" or other PFAS filtering methods urgently, so we can stay below the 20 ppt PFAS level this summer, as described in Randolph Town Council Resolution 2022-02.

Sincerely,

[your name and address so they see you're a resident!]



F) What can we do to reduce PFAS sources?

We can spot-test for PFAS!

Randolph started at 7 spots (marked in yellow) in late 2021.

We are adding 3 more spots (marked in orange) in 2022.

But we need follow-up testing if PFAS levels are high at any of those spots!

And we need to add spots outside of Randolph!

F) What can we do to reduce PFAS sources?

Write to Braintree, Randolph & Holbrook to implement this resolution!

**Resolution 2022-03**

**Introduced By: Councilors Natacha Clerger and Jesse Gordon**

**March 28, 2022**

**RESOLUTION CONCERNING PFAS TESTING**

WHEREAS our drinking water contains PFAS from unknown sources in one or more of the incoming water supplies into our reservoir; and

WHEREAS, in collaboration with the Town, the Massachusetts Department of Environmental Protection (DEP) has undertaken ongoing PFAS testing in streams and water bodies around Randolph; and

WHEREAS the Town of Braintree has undertaken additional PFAS testing at streams and water bodies around Braintree that feed our common reservoir; and

WHEREAS the Town of Randolph participates in an ongoing water quality testing and review program that is mandated and overseen by the DEP:



F) What can we do to reduce PFAS sources?  
This resolution also passed unanimously!

**Resolution 2022-03**

**Introduced By: Councilors Natacha Clerger and Jesse Gordon**

**March 28, 2022**

**RESOLUTION CONCERNING PFAS FILTRATION**

NOW THEREFORE BE IT RESOLVED that the Town of Randolph Town Council supports the DEP PFAS testing that is taking place at streams and water bodies around Randolph for the purpose of ascertaining the sources of the PFAS; and

BE IT FURTHER RESOLVED that the Town Council supports publication of the results of PFAS testing on the Town website in a timely manner; and

BE IT FURTHER RESOLVED that the Town Council supports the sharing of PFAS testing results with the Town of Braintree and the Town of Holbrook, and supports requesting that the Town of Braintree and the Town of Holbrook share their PFAS testing results with the Town of Randolph.

F) What can we do to reduce PFAS sources?

Proposed letter to Braintree, Randolph, Holbrook, & Tri-Town Board:

To whom it may concern,

I am a resident who drinks water from the Tri-Town reservoir, and I'm concerned about PFAS in our drinking water.

Please implement "PFAS source testing" to identify sources of PFAS so they can be remediated once identified, as described in Randolph Town Council Resolution 2022-03.

Sincerely,

[your name and address so they see you're a resident!]

Contact info: Write early & often! By email & letter & phone & Zoom!

William Watkins, Holbrook Select Board, c/o Town Hall,  
50 North Franklin St, Holbrook, MA 02343 Phone: (781) 767-4312

Natacha Clerger and Jesse Gordon, Randolph Town Councilors, c/o Town Hall, 41 South  
Main Street, Randolph MA 02368, [randolphTownCouncil@randolph-ma.gov](mailto:randolphTownCouncil@randolph-ma.gov)

Randolph Town Manager, Brian Howard, [bhoward@randolph-ma.gov](mailto:bhoward@randolph-ma.gov)  
(at same Randolph Town Hall info above – writing to three Town Halls would be best!)

Holbrook Town Administrator, Gregory Hanley, [ghanley@holbrookMassachusetts.us](mailto:ghanley@holbrookMassachusetts.us)  
(781) 767-4312 and/or write to: 50 North Franklin St, Holbrook, MA 02343

Braintree Water Plant, Lou Dutton, [ldutton@braintreema.gov](mailto:ldutton@braintreema.gov) and Mayor Kokoros,  
[mayorsoffice@braintreema.gov](mailto:mayorsoffice@braintreema.gov) or [towncouncil@braintreema.gov](mailto:towncouncil@braintreema.gov) or 781-794-8100 or:  
Town Hall, 1 John F. Kennedy Memorial Drive Braintree, MA 02184

Joint Board, Chris Pellitteri, 781 961-0940, [cpellitteri@randolph-ma.gov](mailto:cpellitteri@randolph-ma.gov)

Tri-Town board, William Alexopoulos [walexopoulos@randolph-ma.gov](mailto:walexopoulos@randolph-ma.gov)